

BEFORE THE
POLLUTION CONTROL HEARINGS BOARD
STATE OF WASHINGTON

IN THE MATTER OF
HILLCREST WATER ASSOCIATION,

Appellant,

v.

STATE OF WASHINGTON,
DEPARTMENT OF ECOLOGY, and
HARBOR VISTA ASSOCIATES,

Respondents.

PCHB No. 80-128

FINAL FINDINGS OF FACT,
CONCLUSIONS OF LAW
AND ORDER

A formal hearing on this matter, the granting of a public ground water withdrawal permit, was held in Tacoma, Washington, on October 20, 1980, before W. A. Gissberg acting as a hearing examiner for the Board.

Appellant, Hillcrest Water Association, (hereinafter Protestant) was represented by its president, George L. Baxter; respondent, Department of Ecology, (hereinafter DOE) by assistant attorney general Laura Eckert; respondent, Harbor Vista (hereinafter Applicant) by Elling Halvorson, pro se.

1 Having issued a proposed order on November 17, 1980, and having
2 received exceptions thereto from the Department of Ecology; and the
3 Board having considered the written testimony, exhibits and exceptions
4 to its proposed order; and having granted said exceptions in part and
5 denying them in part, the Board now makes the following:

6 FINDINGS OF FACT

7 I

8 An application for a permit to appropriate 100 gallons per minute
9 of public ground water on Maury Island, on Puget Sound, in King
10 County, was filed with the DOE by one Stan Jacobson Development
11 Company on February 1, 1977, seeking water for 107 future homes.
12 After encountering financial difficulties, a federal bankruptcy
13 authority caused Jacobson's Maury Island land to be sold to Harbor
14 Vista (applicant). The application was assigned to Harbor Vista, but
15 apparently not before Jacobson had unlawfully drilled the well which
16 is the subject matter of this controversy.

17 II

18 Applicant, Harbor Vista, seeks water for use as a community
19 domestic supply for the ultimate use of 63 homes to be constructed on
20 80 acres of land on lots not all of which are yet included within an
21 approved subdivision. Applicant estimates that the process of gaining
22 approval for the subdivision and the various permits incident to the
23 project is such that the earliest withdrawal of water will be two
24 years from now. There are no other Maury Island water supplies
25 available from water systems serving the public.

26 FINAL FINDINGS OF FACT,
27 CONCLUSIONS OF LAW & ORDER

1 III

2 Protestant is possessed of 2 prior water right certificates
3 authorizing it to withdraw from its well 30 gallons per minute for a
4 maximum of 15 acre-feet per year to serve 100 acres of land owned by
5 16 shareholders of whom only 8 are presently consuming water.

6 Applicant's well is some 900 feet from that of the protestant,
7 both draw fresh water of good quality from the same small artesian
8 aquifer from beneath the sea level.

9 IV

10 After investigating the application and conducting pumping tests
11 and observations upon both wells, DOE issued its decision finding that
12 water is available for appropriation and that the applicant's
13 withdrawal of 50 gallons per minute for a maximum of 25 acre-feet per
14 year will not impair existing rights or be detrimental to the public
15 welfare. DOE's decision (and the ultimate water right and water right
16 certificate) was conditioned so that:

17 "If chloride concentration in the Harbor Vista well
18 reach 150 mg/l, pumping rates shall be reduced or
19 pump intakes raised to or above mean sea level to
20 prevent chloride levels from exceeding 200 mg/l.
Continuous monitoring shall be maintained until
chloride concentrations reach the original value of
50 mg/l."

21 V

22 Protestant's notice of appeal and oral statements at
23 the hearing on this matter do not place in issue the DOE
24 finding that water is available for appropriation. Rather, it
25 is contended that applicant's well, if put to use, will cause
6 the intrusion of salt water from the waters of Puget Sound

27 FINAL FINDINGS OF FACT,
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1 into the fresh water aquifer from which protestant's water now
2 comes. Significantly, the only relief requested by protestant
3 is that the pumping rate of 50 gallons per minute be further
4 reduced and to:

5 "Provide for a mandatory continuing testing program
6 for the chlorine content of the Harbor Vista well, in
7 the reports to both the DOE and Hillcrest to enable
8 the DOE to implement the final recommendation in
their report stating that Harbor Vista pumping be
reduced or stopped if salt water intrusion reaches
150 mg/l."¹

9 VI

10 Although any pumping of water from applicant's well will effect
11 that of protestant such effect will not be adverse if limited to 50
12 gallons per minute. The higher the pumping rate, the greater the
13 likelihood that there will be a salt water intrusion into the
14 aquifer. For that reason the DOE has reduced the applicant's
15 originally sought 100 gallons per minute to 50 gallons per minute.
16 Water is available for appropriation at the rate and quantity
17 recommended by DOE.

18 VII

19 If both wells are continuously pumped to their legal capacity for
20 several days, the pumping level will take place several tens of feet
21 below sea level. However, the wells will not be continuously pumped
22 because of the nature of the residential usage of water and the acre
23 feet limitation imposed by DOE. Even though well water levels are
24 pumped below sea level, it is only theoretical that salt water will
25

26 1. Protestant's Notice of Appeal

1 then enter the aquifer.

2 VIII

3 If the static water level of the aquifer falls below sea level,
4 there will probably be a salt water effect. It is not known what
5 effect the pumping of the wells will have on the static level but it
6 is likely that the recharge of fresh water to the aquifer will be such
7 so as not to reduce the static water level to below sea level. Since
8 precipitation is less during August and September, the recharge and
9 static water levels will be lowest during those months. Pumping tests
10 conducted upon both wells demonstrate that the recovery rate of each
11 is good.

12 IX

13 Exhibit R-4 is the log of protestant's well in the year 1962.
14 Exhibit R-3 is the log of applicant's well in the year 1977. An
15 examination of those exhibits reveal the static level of protestant's
16 well could have fallen by as much as 198 feet. This piece of evidence
17 is troublesome but the DOE dismisses it by the assertion that the 1962
18 well log (R-4), is simply unreliable.

19 X

20 Infiltration from precipitation is the major source of aquifer
21 recharge on islands and precipitation has been less during the past
22 few years.

23 XI

24 In addition to protestant's prior water rights, there are 14
25 surface water rights on springs located within 1/4 mile from
26 applicant's well. However, the source of those spring flows is from a
27

1 different higher (in elevation) aquifer separated by a layer of clay
2 from the lower aquifer which supplies water to protestant's and
3 applicant's wells. During the pumping tests on the wells there were
4 no effects on the discharge of water from the springs. Applicant's
5 well will not impair those prior water rights.

6 XII

7 During the DOE aquifer test on June 29, 1979, when the water level
8 of applicant's well reached its lowest level, i.e., 8 feet below sea
9 level, chloride (salt) of 50 mg/l was measured in the well. In May,
10 1978, chloride in protestant's well was measured at 6.2 mg/l. These
11 quantities are well within the EPA drinking water standards which are:

12 0 mg/l to 250 mg/l = high quality

13 250 mg/l to 500 mg/l = fair quality

14 500 mg/l to 750 mg/l = poor quality

15 XIII

16 As a result of the chloride content found to be in the applicant's
17 well as described in Finding of Fact XII, the DOE concluded that salt
18 water intrusion into the aquifer and well of protestant was a
19 "possibility" but that there would be none so long as the permitted
20 pumping rates and quantities of both wells are not exceeded.
21 Nonetheless, the testing and monitoring condition described in Finding
22 of Fact IV was imposed by the DOE. It is not clear who has the burden
23 and responsibility for, nor the frequency of, such testing and
24 monitoring but on closing argument the attorney for DOE stated that
25 agency was "committed to monitoring" and a DOE witness stated that
26 agency would measure chloride concentrations once each month.

1 XIV

2 In other areas of potential salt water intrusion, the DOE
3 presently gathers monthly water samples and tests for chloride content
4 in its facility at Redmond, Washington.

5 XV

6 Any Conclusion of Law which should be deemed a Finding of Fact is
7 hereby adopted as such.

8 From these Findings of Fact come the following

9 CONCLUSIONS OF LAW

10 I

11 There is water available for appropriation. Since the use of the
12 water is sought for domestic purposes, it is therefore a beneficial
13 use. RCW 90.54.020(1).

14 II

15 Before a water right permit can be issued the appropriation of
16 water thereunder must also be found not to impair existing rights or
17 be detrimental to the public interest. If as a result of the
18 appropriation of water from a common aquifer by one having an inferior
19 right, that fresh water aquifer is fouled by the intrusion of salt
20 water, the appropriation of water therefrom by one having a prior
21 existing right will have been "impaired" within the statutory meaning
22 of that word. That conclusion is bolstered by RCW 90.54.020(4) which
23 provides that:

24 "Adequate and safe supplies of water shall be
25 preserved and protected in potable condition to
26 satisfy human domestic needs."

26 FINAL FINDINGS OF FACT,
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1 III

2 Where there is a "possibility" that well development might result
3 in salt water contamination of a domestic aquifer, the development
4 "threatens to prove detrimental to the public interest" within the
5 statutory meaning of that phrase, unless testing and monitoring
6 provisions clearly adequate to prevent such contamination are imposed
7 upon the water right permit. This conclusion is bolstered by RCW
8 90.54.020(4) which provides that:

9 Adequate and safe supplies of water shall be
10 preserved and protected in potable condition to
satisfy human domestic needs.

11 IV

12 The testing and monitoring requirements set forth in Finding of
13 Fact IV herein are insufficient to protect against impairment of
14 existing rights and detriment to the public welfare.

15 While we disagree with the contention of DOE that the Board does
16 not have the power to condition as was done in the proposed decision,
17 we are placing no conditions in this final decision. Instead, we
18 conclude that this matter should be reversed and remanded for the
19 imposition by DOE of such monitoring and testing conditions as are
20 consistent with this decision.

21 V

22 Any Finding of Fact which should be deemed a Conclusion of Law is
23 hereby adopted as such.

24 From these Conclusions the Board enters this
25

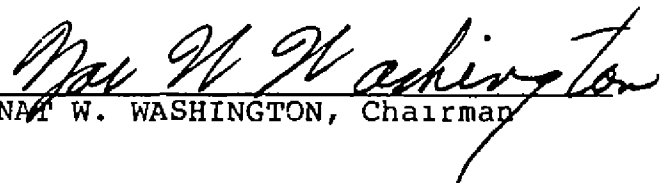
26 FINAL FINDINGS OF FACT,
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1 ORDER

2 The Department of Ecology decision to issue a permit under ground
3 water application No. G1-22791 is reversed and remanded for the
4 imposition of such monitoring and testing conditions as are consistent
5 with this decision.

6 DONE this 26th day of January, 1981.

7 POLLUTION CONTROL HEARINGS BOARD

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9 
10 NAT W. WASHINGTON, Chairman

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12 
13 DAVID AKANA, Member

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15
16 MARIANNE CRAFT NORTON, Member